7 January 2022

**Public Comment for CARB’s LCFS Program
Low Carbon Fuel Incentives for Local Public Safety, Health, and Inclusive Economic Growth**

The Low Carbon Fuel Standard (LCFS) is a hallmark of CARB’s commitment to reduce climate risk arising from mobile fossil fuel emissions. Despite the global GHG reductions achieved by this program, however, its contribution to California’s own environmental, public health, safety, and economic challenges has been unnecessarily limited. To date, about 70% of approved LCFS pathways have been certified outside the state (Figure 1), including swine production in Missouri, corn biofuel conversion in the Midwest, and cooking oil recycling in Singapore. While these processes may have comparable impacts on global warming risk, they do not address the local air quality and economic threats from the state’s own mobile emissions and the wildfire crisis.

**Figure 1: Outsourcing toxic emission reduction and green jobs?**



California’s own montane and agricultural communities, including some of our most economically disadvantaged and health-vulnerable populations, are living with escalating risks from a long-term wildfire emergency and continued high levels of criteria and other toxic local emissions from mobile sources. Meanwhile, the state currently produces more than 54MT of waste biomass per year, representing an "emissions overhang" of organic material that threatens more the release the methane and other greenhouse gases through burning and/or decomposition. Today, the volume of this waste is accelerating because of urgent public and private wildfire risk management strategies, while burning restrictions are increasing the biomass loads of state landfills.

Reconciling these emission and waste management challenges is currently being addressed by innovations in biomass energy conversion, including gasification, anerobic digestion, and other technologies being deployed at varying scale around the state. Historically, biomass energy has been dominated by large scale facilities, with very high logistical costs and persistent reliance on conventional fuel transport, but the latest emerging technologies are scalable to the enterprise/farm level where they can directly produce local biofuel, green electricity, and biochar for soil amendment (as an example, please see <https://cariboubiofuels.com/> ). Promoting these innovations will increase incentives for clean fuel substitution and healthier soils in California, reducing net emissions from vehicles, machinery, burning, and biomass decomposition.

We recommend CARB consider revising its Carbon Credit and LCFS policies to formally and fairly account for in-state and local community benefits from biomass energy conversion, including reduced local wildfire risk, toxic emissions, innovation, and job growth, especially among underserved demographics. From a global warming perspective, reducing CO2 emissions may confer similar benefits anywhere on the planet, but local biomass-to-biofuel-and-bioproduct conversion achieves this while offering an array of benefits the state needs now, more than ever.